Incidence
The 2021 population size in the United States was estimated to be about 333 million people. The most recent estimate of the annual incidence of traumatic spinal cord injury (SCI) is approximately 54 cases per one million people in the United States, which equals about 18,000 new SCI cases each year. New SCI cases do not include those who die at the location of the incident that caused the SCI.


Prevalence
The estimated number of people with SCI living in the United States is approximately 299,000 persons, with a range from 253,000 to 378,000 persons.


Age at Injury
The average age at injury has increased from 29 years during the 1970s to 43 since 2015.

Sex
About 78% of new SCI cases since 2015 are male.

Race/Ethnicity
Recently, about 25% of injuries have occurred among non-Hispanic blacks, which is higher than the proportion of non-Hispanic blacks in the general population (13%).

Cause
Vehicle crashes are the most recent leading cause of injury, closely followed by falls. Acts of violence (primarily gunshot wounds) and sports/recreation activities are also relatively common causes. A customizable Leading Causes of SCI tool is at uab.edu/NSCISC.

Lengths of Stay
Lengths of stay in the hospital acute care unit have declined from 24 days in the 1970s to 12 days since 2015. Rehabilitation lengths of stay have also declined from 98 days in the 1970s to 32 days since 2015.

Neurological Level and Extent of Lesion
Recently, incomplete tetraplegia is the most frequent neurological category. The frequency of incomplete and complete paraplegia is virtually the same. Less than 1% of persons experienced complete neurological recovery by the time of hospital discharge.
Education
Since 2015, about a quarter of persons with SCI have a college degree at the time of their injury, compared with 45% of people who survived 40 years of injury.

<table>
<thead>
<tr>
<th>Education (%)</th>
<th>At Injury</th>
<th>Year 10</th>
<th>Year 20</th>
<th>Year 30</th>
<th>Year 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Only</td>
<td>51.8</td>
<td>52.3</td>
<td>49.3</td>
<td>47.4</td>
<td>41.8</td>
</tr>
<tr>
<td>College or Higher</td>
<td>23.5</td>
<td>25.8</td>
<td>28.4</td>
<td>26.9</td>
<td>34.5</td>
</tr>
</tbody>
</table>

Marital Status
Since 2015, the percentage of people who are married is relatively consistent up to year 30 post-injury, with single/never married status slowly decreasing and divorce status slowly increasing.

<table>
<thead>
<tr>
<th>Status (%)</th>
<th>At Injury</th>
<th>Year 10</th>
<th>Year 20</th>
<th>Year 30</th>
<th>Year 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>44.9</td>
<td>42.5</td>
<td>37.9</td>
<td>35.9</td>
<td>33.6</td>
</tr>
<tr>
<td>Married</td>
<td>36.9</td>
<td>37.2</td>
<td>33.9</td>
<td>34.4</td>
<td>35.4</td>
</tr>
<tr>
<td>Divorced</td>
<td>8.4</td>
<td>10.2</td>
<td>18.7</td>
<td>20.2</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Occupational Status
Since 2015, 18% of persons with SCI are employed at year 1 post-injury. The employment rate increases over time to 31% at 30 or more years post injury.

<table>
<thead>
<tr>
<th>Status (%)</th>
<th>At Injury</th>
<th>Year 10</th>
<th>Year 20</th>
<th>Year 30</th>
<th>Year 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>68.5</td>
<td>16.4</td>
<td>25.3</td>
<td>29.5</td>
<td>31.9</td>
</tr>
<tr>
<td>Student</td>
<td>7.8</td>
<td>6.4</td>
<td>2.7</td>
<td>0.7</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Historical Lifetime Costs
The average yearly expenses (health care costs and living expenses) and the estimated lifetime costs that are directly attributable to SCI vary greatly based on education, neurological impairment, and pre-injury employment history. The below estimates do not include any indirect costs such as losses in wages, fringe benefits, and productivity (indirect costs averaged $82,329 per year in 2021 dollars).

![Table showing average yearly expenses and estimated lifetime costs by severity of injury and age at injury.]

Re-Hospitalization
Since 2015, about 30% of persons with SCI are re-hospitalized one or more times during any given year following injury. Among those re-hospitalized, the length of hospital stay averages about 18 days. Diseases of the genitourinary system are the leading cause of re-hospitalization, followed by disease of the skin. Respiratory, digestive, and musculoskeletal diseases are also common causes.

Historical Life Expectancy
The average remaining years of life for persons with SCI have not improved since the 1980s and remain significantly below life expectancies of persons without SCI. Mortality rates are significantly higher during the first year after injury than during subsequent years, particularly for persons with the most severe neurological impairments. A customizable Life Expectancy Calculator tool is at uab.edu/NSCISC.

![Table showing life expectancy by severity of injury and age at injury.]

Historical Causes of Death
Persons enrolled in the National SCI Database have now been followed up to 48 years after injury. During that time, the causes of death that appear to have the greatest impact on reduced life expectancy for this population are pneumonia and septicemia. Mortality rates are declining for cancer, heart disease, stroke, arterial diseases, pulmonary embolus, urinary diseases, digestive diseases, and suicide.

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